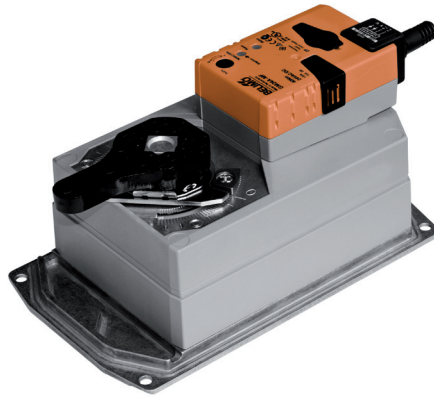


Retrofit rotary actuator for butterfly valves

- Nominal torque 90 Nm
- Nominal voltage AC/DC 24 V
- Control Open-close



**Technical data**

<b>Electrical data</b>	Nominal voltage	AC/DC 24 V
	Nominal voltage frequency	50/60 Hz
	Nominal voltage range	AC 19.2...28.8 V / DC 19.2...28.8 V
	Power consumption in operation	4.5 W
	Power consumption in rest position	2 W
	Power consumption for wire sizing	7 VA
	Connection supply / control	Cable 1 m, 3 x 0.75 mm <sup>2</sup>
	Parallel operation	No
<b>Functional data</b>	Torque motor	Max. 90 Nm (not constant)
	Manual override	Gear disengagement with push-button, can be locked
	Running time motor	150 s / 90°
	Sound power level motor	45 dB(A)
	Position indication	Yes
<b>Safety</b>	Protection class IEC/EN	III Safety extra-low voltage
	Degree of protection IEC/EN	IP54
	EMC	CE according to 2004/108/EC
	Certification IEC/EN	IEC/EN 60730-1 and IEC/EN 60730-2-14
	Mode of operation	Type 1
	Rated impulse voltage	0.8 kV
	Control pollution degree	3
	Ambient temperature	-30...50 °C
	Non-operating temperature	-40...80 °C
	Ambient humidity	95% r.h., non-condensing
Maintenance	Maintenance-free	
<b>Mechanical data</b>	Connection flange	F07
<b>Weight</b>	Weight approx.	3.4 kg

**Safety notes**


- This device has been designed for use in stationary heating, ventilation and air conditioning systems and is not allowed to be used outside the specified field of application, especially in aircraft or in any other airborne means of transport.
- Only authorised specialists may carry out installation. All applicable legal or institutional installation regulations must be complied during installation.
- The surface temperature between actuator and fitting may not exceed 50 °C.
- The switch for changing the direction of rotation may not be adjusted.
- The angle of rotation is not permitted to be subjected to mechanical limitation. It is forbidden to alter the mechanical end stops.
- The device may only be opened at the manufacturer's site. It does not contain any parts that can be replaced or repaired by the user.
- Cables must not be removed from the device.
- The device contains electrical and electronic components and is not allowed to be disposed of as household refuse. All locally valid regulations and requirements must be observed.

**Product features**

**Application** For butterfly valves with the following mechanical specifications:  
 – ISO 5211 : F07 (hole circle diameter on the flange for mounting the fitting)  
 – ISO 5211 : quadratic or flat head stem head geometry

**Tappet shaft** The form fit adapter is not included in the scope of delivery (see «Accessories»).



Type	s [mm]
ZDV-02	17



Type	s [mm]	d8 [mm]
ZDV-01	13	19

**Direct mounting** Simple direct mounting on the butterfly valve. The mounting orientation in relation to the butterfly valve can be selected in 90° (angle) increments.

**Manual override** Manual override with push-button possible (the gear is disengaged for as long as the button is pressed or remains locked).

**High functional reliability** The actuator is overload protected, requires no limit switches and automatically stops when the end stop is reached.

**Accessories**

	Description	Type
<b>Electrical accessories</b>	Auxiliary switch, add-on, 1 x SPDT	S1A
	Auxiliary switch, add-on, 2 x SPDT	S2A
	Feedback potentiometer 140 Ohm, add-on	P140A
	Feedback potentiometer 200 Ohm, add-on	P200A
	Feedback potentiometer 500 Ohm, add-on	P500A
	Feedback potentiometer 1 kOhm, add-on	P1000A
	Feedback potentiometer 2.8 kOhm, add-on	P2800A
	Feedback potentiometer 5 kOhm, add-on	P5000A
	Feedback potentiometer 10 kOhm, add-on	P10000A
<b>Mechanical accessories</b>	Form fit adapter DR, 17x17x19 mm	ZDV-02
	Form fit adapter DR, 13xØ19x33 mm	ZDV-01

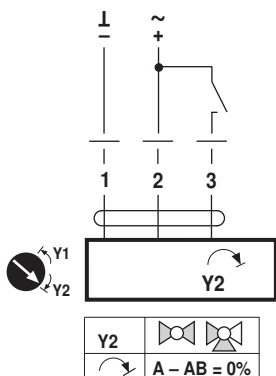
**Electrical installation**



- Notes**
- Connection via safety isolating transformer.
  - Direction of rotation switch is covered. Factory setting: Direction of rotation Y2.

**Wiring diagrams**

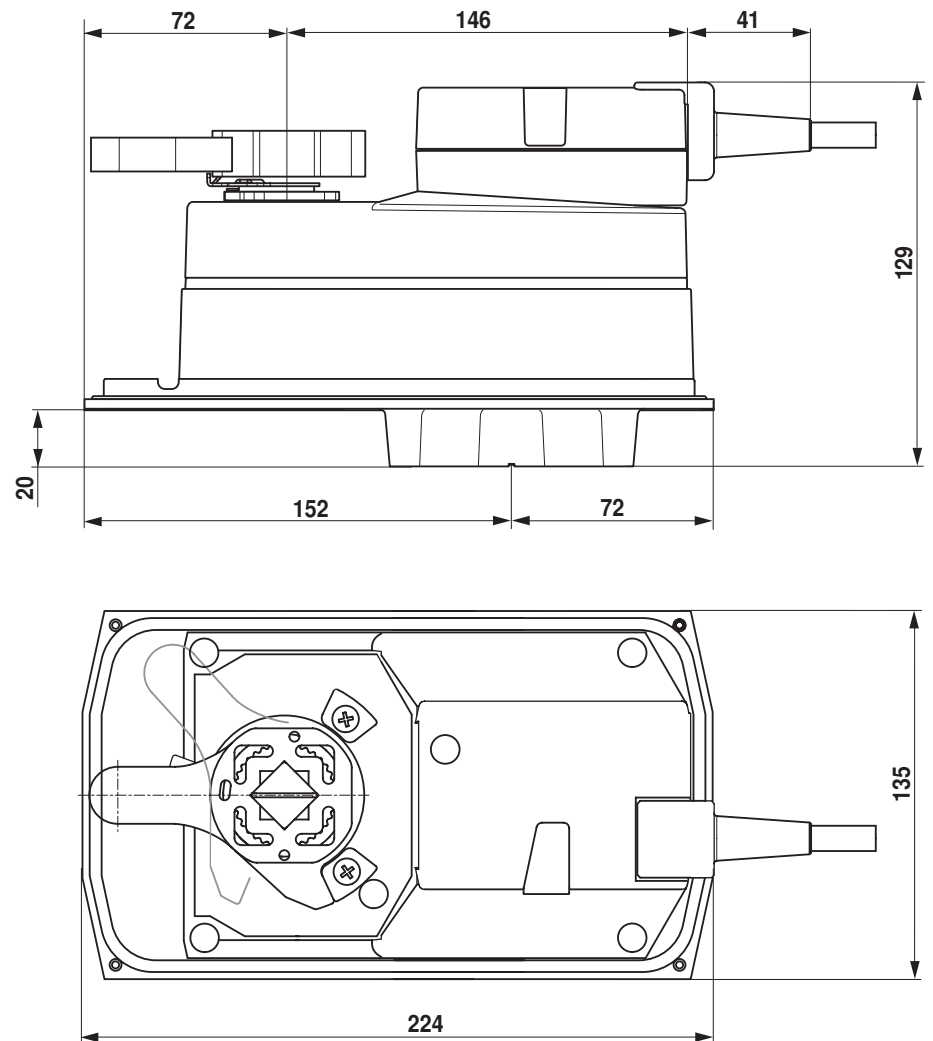
AC/DC 24 V, open-close



**Cable colours:**  
 1 = black  
 2 = red  
 3 = white

## Dimensions [mm]

## Dimensional drawings



## Further documentation

- General notes for project planning